BRUHAT BANAGLORE MAHANAGARA PALIKE

Executive Engineer-Yelhanka Division

Detailed Estimate

Name of Work: Providing Asphalting to Harohalli Anjeneyaswamy temple to Harohalli lake and Harohalli Srinidhi layout in ward no-02 of Yelhanka subdivision

Estimate Amount : 9990000.00

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	CIVIL WORKS								
1	KSRRB 300-1. **Earthwork excavation by manual means** in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 **(Page No141., I.No.19.1 of KPWD S.R 2015-16).**								
	New Drain	**Cum**							
	Cross roads								
	Ch: (0 - 169)	B/s	2	169	1.20	0.900	365.04		
	Ch: (0 - 57)	L/s	1	57	0.90	0.700	35.91		
							400.95	**168.76**	**67664.32**
2	KSRB 4-1.2 : Providing and laying in **position plain cement concrete of mix1:3:6** with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregtes @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted,in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications.Specification No. KBS 4.1, 4.2 **(Page No 12., I.No.4.2 of KPWD S.R 2015-16).**								
	New Drain	**Cum**							
	Cross roads								
	Ch: (0 - 169)	B/s	2	169	0.90	0.100	30.42		
	Ch: (0 - 57)	L/s	1	57	0.60	0.100	3.42		
							33.84	**5236.92**	**177217.37**
3	Providing and laying **Plain /reinforced cement concreteM20** for Box drain walls of thickness 10cm to 20cm including centring shuttering for work etc. complete as per approved drawing and design MORTH specification No.1500,1700,2200 **(Page No258., I.No.37.59.2 of KPWD S.R 2014-15).**								
		Cum							
	RAFT								
	New Drain								
	Cross roads								
	Ch: (0 - 169)	B/s	2	169	0.90	0.150	45.63		
	Ch: (0 - 57)	L/s	1	57	0.60	0.100	3.42		
	WALL								
	New Drain								
	Cross roads								
	Ch: (0 - 169)	B/s	4	169	0.15	0.900	91.26		
	Ch: (0 - 57)	L/s	2	57	0.10	0.600	6.84		
							147.15	**6931.44**	**1019961.40**
4	Providing and laying **cement concrete using 20mm** and down size granite coarse aggregates and fine aggregates of ready mixed concrete for RCC works laid in 15 cm thick layers and well compacted including vibrating curing etc., including smooth finish in CM 1:3, with all lead and lift etc., complete. (exculsive of cost of steel and fabrication charges) Ready mixed Cement concrete for Beams, Columns, Staircase and Roof **with M-20 (Page No 18., I.No.4.49.1 of KPWD S.R 2015-16).**								
		Cum							
	For SWD								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amoun in Rs
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Slab		1	9	6.00	0.300	16.20		
	Parapet wall		2	6	0.25	1.200	3.60		
							19.80	**6332.04**	**125374.39**
5	KSRB 4.9.2 : Providing **T .M.T steel reinforcement** for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 for TMT Bars Fe500 **(Page No 17., I.No.4.46.2 of KPWD S.R 2014-15).**								
		Tonne							
	from above item								
	For Drain			147.15*60 /1000			8.83		
	For SWD SLAB & Parapet			19.8*75 /1000			1.19		
							10.02	**69805.80**	**699244.70**
6	KSRB 4-6.3 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **flat surface** such as suspended floors, roofs, landings, balconies and likes, thickness above 200 mm including cost of all materials, labour complete as per specification. Specification No. KBS 4.6.2 **(Page No 15., I.No.4.30 of KPWD S.R 2015-16).**								
		Cum							
	For SWD								
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Slab		1	9	4.00		36.00		
							36.00	**403.92**	**14541.12**
7	KSRB 4-6.4 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for **vertical surface** such as walls at any thickness , ncluding attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2 **(Page No 15., I.No.4.31 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Parapet wall		4	6		1.200	28.80		
							28.80	**306.72**	**8833.54**
8	Providing precast slab of **100 mm thick** including cost of all materials, labour, curing,transportation,loading ,unloading,etc.,complete as per the direction of engineer in charge- Data rate								
		Sqm							
	New Slab								
	Cross road								
	Ch: (0 - 169)	B/s	2	169	0.90				
	Ch: (0 - 57)	L/s	1	57	0.60		304.20		
							34.20		
							338.40	**1834.00**	**620625.60**

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
9	Providing and fixing **pre cast solid cement concrete kerb stones** made out of C.C. 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork,curing,including cost of all materials, labour, hire charges of machinery, loading,unloading, lead and lift, transportation etc., complete. **(Page No 25., I.No.5.30 of KPWD S.R 2015-16).**								
		Nos							
	Cross road								
	Ch: (0 - 169)	B/s	2	169					
							751.00		
							751.00	**320.76**	**240890.76**

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	ROAD WORKS								
10	KSRRB M300-14. **Excavation for roadwork** in all type of soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location to a lead of 1.00 km and complete as per specifications. MORTH Specification No.301 **(Page No 142., I.No.19.14 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00	0.425	502.78		
	Ch: (0 - 57)		1	57	4.00	0.425	96.90		
							599.68	**134.20**	**80476.39**
11	KSRRB 300-58. **Compaction of original ground** with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 **(Page No 148., I.No.19.64 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00		1183.00		
	Ch: (0 - 57)		1	57	4.00		228.00		
							1411.00	**4.86**	**6857.46**
12	KSRRB M400-6.1. Construction of **granular sub-base** by providing close graded material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications. A. Plant Mix Method.Close graded granular sub-base material as per 400-1 For Grading- II Material **(Page No 154., I.No.20.4.2 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00	0.150	177.45		
	Ch: (0 - 57)		1	57	4.00	0.150	34.20		
							211.65	**1622.16**	**343330.16**
13	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to **wet mix macadam** specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH Specification No. 406 **(Page No 157., I.No.20.18 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00	0.225	266.18		
	Ch: (0 - 57)		1	57	4.00	0.225	51.30		
							317.48	**1713.96**	**544139.45**

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
14	KSRRB M500-6. Providing and applying **primer coat** with S.S. bitumen emulsion on prepared surface of granular base such as WBM,WMM ,including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per Specifications. MORTH Specification No. 502 **(Page No 160., I.No.21.6 of KPWD S.R 2015-16).**								
		Sqm							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00		1183.00		
	Ch: (0 - 57)		1	57	4.00		228.00		
							1411.00	**32.40**	**45716.40**
15	KSRRB 500-2. **Cleaning the existing black topped** surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH / Chapter 5**(Page No 160., I.No.21.2 of KPWD S.R 2015-16).**								
		Sqm							
	Cross road from Gantiganahalli main road from Harohalli circle								
	Ch: (0 - 1443)		1	1443	6.00		8658.00		
							8658.00	**3.24**	**28051.92**
16	KSRRB 500-7. Providing and applying **tack coat** using 80/100 grade Bitumen (VG10) on the prepared black topped surfaces at 2.5 kg per 10 sqm , heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH/Chapter 5 **(Page No 160., I.No.21.7 of KPWD S.R 2015-16).**								
		Sqm							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00		1183.00		
	Ch: (0 - 57)		1	57	4.00		228.00		
	Cross road from Gantiganahalli main road from Harohalli circle								
	Ch: (0 - 1443)		1	1443	6.00		8658.00		
							10069.00	**15.12**	**152243.28**
17	KSRRB M500- 15. Providing, laying **dense graded bituminous macadam** using 40/60 THP capacity H.M.P with Mechanical paver Gr-II(50mm to 75mm), crushed aggregates of specified grading premixed with 4.5% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandeem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.507 **(Page No 161., I.No.21.17.6 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00	0.050	59.15		
	Ch: (0 - 57)		1	57	4.00	0.050	11.40		
	taking 15% for profile correction								

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amoun in Rs
	Cross road from Gantiganahalli main road from Harohalli circle								
	Ch: (0 - 1443)		1	1385.28		0.050	69.26		
							139.81	**7927.20**	**1108333.54**
18	KSRRB M500- 15 Providing, laying **bituminousConcrete** using **40/60 THP** capacity H.M.P with Mechanical paver Gr-II(30mm to 45mm), crushed aggregates of specified grading premixed with 6% VG 30 grade bituminous binder and , transporting the hot mix to work site , laying to the required level and grade, rolling with wheeled , vibratory and tandeem rollers to achieve the desired density including all leads and lift cost of all materials, labour, HOM of machineries complete as per specifications MORTH Specification No.509 **(Page No 164., I.No.21.22.6 of KPWD S.R 2015-16).**								
		Cum							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		1	169	7.00	0.030	35.49		
	Ch: (0 - 57)		1	57	4.00	0.030	6.84		
	Cross road from Gantiganahalli main road from Harohalli circle								
	Ch: (0 - 1443)		1	1443	6.00	0.040	346.32		
							388.65	**9822.60**	**3817553.49**

Sl. No.	Particulars	Unit / Rate	Nos	L in m	B in m	D in m	Quantity	Rate in Rs	Total Amount in Rs
	ROAD FURNITURES								
19	KSRRB 800-1. Painting **two coats after filling the surface** with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8**(Page No 179, I.No.24.1 of KPWD S.R 2015-16).**								
	Kerb Painting	**Sqm**							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)	B/s	2	169		0.250	84.50		
							84.50	**61.56**	**5201.82**
20	KSRRB M800-13. Providing and laying of **hot applied thermoplastic compound** 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 **(Page No 181., I.No.24.15 of KPWD S.R 2015-16).**								
		Sqm							
	Cross road from Kenchenahalli main road(SWD) to End road(Srinidhi layout)								
	Ch: (0 - 169)		2	169	0.10		33.80		
	Ch: (0 - 57)		2	57	0.10		11.40		
	Cross road from Gantiganahalli main road from Harohalli circle								
	Ch: (0 - 1443)		2.5	1443	0.10		360.75		
							405.95	**473.04**	**192030.59**
	Sub Total								**9298287.70**
21	Cost towards Design Report and Detailed Estimate,PMC/Third party								**92982.88**
22	**Cost of Plastic@ 8% of bitumen qty for BC**	**Kg**	1	4383.97				**27.00**	**118367.24**
23	Cost towards DLP								**464914.39**
24	Miscllenous and other charges								**15447.79**
	Grand Total								**9990000.00**

Certificate:-

1. That the workspot inspected by me and found work is necessary.
2. That the area comes with in the Bruhat Bangalore Mahanagara Palike Limits.
3. That the rates are adopted based on the PWD SR of 2015-16
4. That the provisions made in the estimate are necessary and quite essential.

Consultant:

For M/s MECADEZ CORE TECHNOLOGIES PVT LTD

Asst. Engineer
Ward No-02
BBMP

AEE
Yelhanka Sub Division
BBMP

Executive Engineer
Yelhanka Division
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